



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,690	06/01/2001	Hiroshi Okada	32405W081	7691

7590 05/25/2005

Smith, Gambrell & Russell, LLP
Beveridge, DeGrandi, Weilacher & Young
Intellectual Property Group
1850 M Street, N.W. (Suite 800),
Washington, DC 20036

EXAMINER

TRAN, TAM D

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,690

Applicant(s)

OKADA ET AL.

Examiner

Tam D Tran

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 11-14, are rejected under 35 U.S.C. 102(e) as being anticipated by Usuki et al. (USPN 6239771 B1), hereinafter simply Usuki.

2. In regard to claim 1, Usuki teaches an image cut-away/display system comprising: a plurality of image taking means for taking images in continuous view areas; image combining means for combining the images taken by the image taking means to form a single wide-area view image; see col.19 line 65- col.20 line 5; view-point data generating means (operation panel) for generating view point data for each of users based on motion of eyeballs of each user; see col.22 lines 1-5; image cut-away means for cutting away images for each user from the single wide-area view image based on the view-point data for each user (display unit processes image and splits (cut away) the image into two images onto two screens (left and right display unit)); and image displaying means for displaying the cut-away images for each user at a view point of each user. See col.20 lines 5-17.

3. In regard to claim 11, Usuki teaches an image cut-away/display system comprising: a plurality of image taking means for taking images in continuous view areas; image combining

Art Unit: 2676

means for combining the images taken by the image taking means to form a single wide-area view image; see col.19 line 65- col.20 line 5; view-point data generating means (operation panel) for generating view point data for each of users based on motion of eyeballs of each user; see col.22 lines 1-5; image cut-away means/image editing means for cutting away images for each user from the single wide-area view image based on the view-point data for each user (display unit processes image and splits (cut away) the image into two images onto two screen (left and right display unit)); and image displaying means for displaying the cut-away images for each user at a view point of each user. See col.20 lines 5-17.

4. In regard to claim 2, Usuki teaches An image cut-away/display system, wherein the image taking means include a plurality of cameras arranged around a reference center. See col.28 lines 14-20.

5. In regard to claims 3, 12, Usuki teaches an image cut-away/display system, wherein the image displaying means includes a head-mount display by which the images from the image cut-away means and actual views are overlapped with each other. See col.1 lines 10-15.

6. In regard to claims 4, 6, 7, 13, Usuki teaches an image cut-away/display system, wherein the view-point generating means includes a head-motion tracker for tracking motion of a head of each user or an eyeball positional detector for tracking eye movement of each user. See col.22 lines 1-5.

7. In regard to claims 5, 14, Usuki teaches an image cut-away/display system comprising: a plurality of cameras mounted on a vehicle for taking continuous pictures of a wide range of surroundings without a rift; see col.28 lines 14-20; a display apparatus mounted on a head of a crew member in said vehicle for display one of said continuous pictures; see col.1 lines 20-28;

Art Unit: 2676

image combining means electronically and optically connected to said plurality of cameras for making a continuous image of said surroundings by combining said pictures; see col.20 lines 17-23; view-point information generating means included in said display apparatus for generating a view-point information of said crew member; see col.22 lines 1-5; image cut-away means electronically and optically interposed between said image combining means and said display apparatus for editing said continuous image so as to make an optimum use thereof for said crew member through said view-point information; see col.20 lines 5-17; and head mounted display means included in said display apparatus for displaying a cut-away image exclusively required for said crew member so as to clearly display said cut-away image with a high quality. See col.1 lines 20-28.

Allowable Subject Matter

1. Claims 8-10 are allowed.
2. The following is a statement of reasons for the indication of allowable subject matter:
The closest prior art shows position adjustment for the images but does not disclose extracting a common image related to each picture or a common color tone thereof from said image; correcting a magnifying ratio of said image; forming a connected image by connecting an overlapped portion of said image; and processing said image by gradation method so as to smoothly and continuously connect said image without an outstanding overlapped portion thereof.
The closest prior art shows position adjustment for the images but does not disclose image editing means electro-optically connected to said memory means and said viewpoint-information

Art Unit: 2676

data outputting means for taking out necessary images for each operator from said single wide area view image based on said viewpoint-information data and for displaying said images for each operator as required so as to promptly and exactly present said images with a high quality at an adequately required position.

Response to Arguments

8. Applicant's arguments filed on 2/23/05, have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach “view-point data generating means based on the motion of the eyeballs of each of the users”. However, examiner respectfully disagrees with the argument because on col.22 lines 1-5, Usuki teaches operation panel (view-point data generating means) controls the movement of the display unit to correspond with the distance between the eyes of each player.

Applicant argues that the prior art does not teach “ image cut-away means”. However, examiner respectfully disagrees with the argument because on col.20 lines 5-17, Usuki teaches display unit processes image and splits (cut away) the image into two images onto two screens (left and right display unit).

Applicant argues that the prior art does not teach “plurality of cameras”. However, examiner respectfully disagrees with the argument because on col.28 lines 14-20, Usuki teaches storing information of cameras in the memory corresponding to plurality of cameras.

For these reasons, the rejections are maintained.

Art Unit: 2676

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **571-272-7793**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **571-272-7778**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2676

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tam Tran

TT
Examiner

Art unit 2676

A handwritten signature in black ink that reads "Matthew C. Bella". The signature is fluid and cursive, with the first name "Matthew" being more prominent than the last name "Bella".

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600